



ARRL
CLUB
#1602

Published by the
Utah Amateur Radio
Club HAM
HOTLINE-583-3002
The MICROVOLT
632 University Street,
Salt Lake City, Ut.
84102

the
MICROVOLT

PERIODICALS
Postage Paid

PLEASE SEND DUES TO:
U.A.R.C.
c/o GARY OPENSHAW
861 ROOSEVELT AVE.
S.L.C. UT 84105

SEND TO:

THE MICROVOLT (USPS 074300) is published monthly except August for \$6 per year or 60 cents per issue by the Utah Amateur Radio Club, 632 University St. Salt Lake City, UT 84102. Second class postage paid at Salt Lake City. POSTMASTER: Send address change to "The Microvolt" 861 Roosevelt Ave., SLC 84105

1996 Utah Amateur Radio Club Officers and Others

President- Bruce Bergen K170M
(Hm) 943-1365 (WK) 486-3371
bbergen@xmission.com

Executive Vice President-Cindy Peters KB7OUT
(HM) 268-4410

Vice President-Gordon Smith K7HFV
582-2438 gordon@shell.portal.com

Secretary- Gary Openshaw KC7AWU
861 Roosevelt Avenue,
SLC UT 84105 484-3407

Treasurer-Chuck Johnson WA7JOS
268-0153 chuck@bts.slc.com

Microvolt Editor- Cokie Eddy KC7MDV
8719 Nowall Drive,
West Jordan, UT 84088
280-1762 Compuserve ext. 73060,1510

Asst. Microvolt Editor-Maurine Streckenfinger KC7HOZ
254-1536

Program Chairpersons
Alan Seyboldt KC7MUZ- Linda Roeder N7HVF
Alan- alairopt@burgoyne.com Linda-364-7006

Ham Hotline-Verna Benson
583-3002

Book Dealer-Fred DeSmet K17KM
2333 East 3225 South.
SLC, UT 84109 485-9245

Historian-Carol McWhorter KC7LLW

ARRL Sect. Mgr. For Utah-Jim Rudnicki N27T

UARC REPEATER COMMITTEE
Trustee-Ron Jones K7RJ 561-2685
Board Liaison Gordon Smith K7HFV 582-2438
Repeater Engineer-Randy Finch K7SL 277-7135
Autopatch. Eng.-Gordon Smith K7HFV
Asst. Rep. Eng.-John Parker KA7GZH

1996 WIMU Chair-Deane Anderson KJ7HO

Past President-Ray Allen N7TEI 593-0949

Repeater Monitor-Alien Wright N7QFI
268-8482

Printing By-Don Baumgartner WN7D
BEEHIVE PRINTING
3326 S. 275 East
SLC, UT 84115 485-9178

Microvolt Midnight Copy-Editors and Coordinators of Mischief- Len Stuart's Trails

The Utah Amateur Radio Club was organized under its present name in 1927, although its beginnings may date back as early as 1909. In 1928, it became affiliated with the American Radio Relay League (club #1602) and is a non-profit organization under the laws of Utah. It holds a club station license with the call W7SP, a memorial call for Leonard (Zim) Zimmerman, an amateur radio pioneer in the Salt Lake City Area. The club meets each month except July and August. The meetings are held on the first Thursday of the month at 7:30 PM in the Exhibition hall located on the Salt Lake County Fairgrounds just south of Murray City Park. Club membership is open to anyone interested in amateur radio; a current license is not required. Dues are \$13 per year, including a MICROVOLT subscription. Those living at the same address as a member who has paid \$13 may obtain a membership without a Microvolt subscription for \$9. ARRL membership renewals should specify ARRL Club #1602. UARC maintains the following repeaters: 146.62 (minus) and 449.10. The repeaters are administered by the UARC repeater committee. Comments and questions may be directed to any committee member. The Lake Mountain repeater (146.76 minus offset) has Autopatch facilities on both the Orem exchange (covering Santequin to Lahi) and the Salt Lake City exchange (covering Draper to Layton). The 449.10 repeater has autopatch facilities into Salt Lake City only. Due to the volume of traffic, only mobiles should use this autopatch. Autopatch use is open to all visitors to our area and to all club members. Non members who wish to use the Autopatch are encouraged to help with and maintaining a club membership. THE MICROVOLT: The Microvolt is the official publication of the club. Deadline for submissions to the Microvolt is the 10th of each month prior to publication, except Aug. All submissions are welcome but what is printed and editing are the responsibility of the UARC board. Reprints are allowed with proper credits to the MICROVOLT, UARC, and authors.



THE MICROVOLT

Publication of the Utah Amateur Radio Club

VOLUME XL ISSUE 6

JULY, 1996

LAST MICROVOLT UNTIL SEPTEMBER!!



HAM HOTLINE!!



(801)583-3002

Tentative 1996 Schedule

JULY	13: Steak Fry (The Spruces)
AUG.	2, 3, 4: WIMU Held at Olympia Park Hotel, Park City
SEPT.	5: Swap Meet
OCT.	3: (still undecided)
NOV	7: HomeBrew and Election (Microvolt Editor's Birthday!) Nominations for New Club Officers and Microvolt Editor (Just Joking) But I will run again.
DEC.	5: Elections and Plans for The New Year

**LAST CALL WIMU
'96**

Remember that The 64th Annual Wyoming, Idaho, Montana and Utah Amateur Radio Convention



(WIMU) for 1996 will be held August 2, 3, and 4 in Park City, Utah.

For reservations you can call the Olympia Park Hotel at 1-800-234-9003 for reservations starting now. We have been given a special rate of \$62 per room, plus tax, single or double occupancy. Be sure to tell them that you are a part of WIMU to get the discount.

Camping reservations may be made with the Hidden Haven Campground (8 miles west of the hotel at the Kimball Junction exit of I-80) by calling 801-649-8935.

The hotel and campground hosts have suggested that reservations be made as early as possible due to the Arts Festival being held that

same weekend. Some of the spectacular activities that have been scheduled for the HAMS and their families, are a multitude of forums and a lot of prizes. The forums include;

- Packet Radio
- Batteries
- QRP-low power Operation
- DX Operations
- Basic Radio Etiquette For New Hams
- Winter Driving Techniques By UTHP
- CW Operations
- ARES/RACES 72-Hour Kits
- Satellite Communications
- Antennas
- Radio Direction Finding
- MARS Emergency Reporting
- Electronic Test Equipment and Building Techniques
- HANDI- HAMS
- Ballooning and Amateur Radio
- ARRL Discussion With Visits From Headquarters

You can now reach Duane at kj7ho@utah-inter.net 443 East Brandt CT., #30

SLC, UT 84107 phone (801)288-1859

You can still visit our WIMU web page at

<http://www.xmission.com/~mistrail/WIMU96.html>



UTAH AMATEUR RADIO EXAMINATION

SCHEDULE

May 14, 1996

(For more details see the listing of "Programs by City" at the end.)

Date	Location	Contact Person	Home Ph.	Bus. Ph.
07/03/96 (Wed.)	Farmington	Brent Thomas, AC7H	292-8110	539-3700
07/08/96 (Mon.)	Delta	Stephen Bowes, KB7SSF	864-5936	
07/17/96 (Wed.)	Provo	Steve Whitehead, NV7V	465-3983	225-5200
07/30/96* (Tues.)	Salt Lake C.	Eugene McWherter, N7OVT	484-6355	
08/03/96 (Sat.)	Salt Lake C.	Gordon Smith, K7HFV	582-2438	534-8116
08/21/96 (Wed.)	Provo	Steve Whitehead, NV7V	465-3983	225-5200
08/27/96* (Tues.)	Salt Lake C.	Eugene McWherter, N7OVT	484-6355	
09/04/96 (Wed.)	Farmington	Brent Thomas, AC7H	292-8110	539-3700
09/09/96 (Mon.)	Delta	Stephen Bowes, KB7SSF	864-5936	
09/18/96 (Wed.)	Provo	Steve Whitehead, NV7V	465-3983	225-5200
09/24/96* (Tues.)	Salt Lake C.	Eugene McWherter, N7OVT	484-6355	
10/05/96 (Sat.)	Salt Lake C.	Gordon Smith, K7HFV	582-2438	534-8116
10/16/96 (Wed.)	Provo	Steve Whitehead, NV7V	465-3983	225-5200
10/29/96* (Tues.)	Salt Lake C.	Eugene McWherter, N7OVT	484-6355	
11/02/96 (Sat.)	Ogden	Matt George, AB7GM	393-9159	
11/20/96 (Wed.)	Provo	Steve Whitehead, NV7V	465-3983	225-5200

THE MICROVOLT

* Only Novice and Technician elements (1A, 2, and 3A) given at this session.

Send additions or corrections to Gordon Smith, K7HFV.
EXAMINATION PROGRAMS BY CITY

City: Brigham City Contact Person: Bob Anderson, AA7TR

VEC: ARRL Phone: 257-3021

Location: Basement of Zion's Bank at Main and First North

Schedule: Twice annually, spring and fall. Details vary.
Code tests at 6 p.m. Written tests at 7 p.m.

City: Farmington Contact Person: BrenThomas, AC7H
VEC: ARRL 637 East 2150 South

Bountiful, Utah 84010

Home Ph: 298-3322 Bus. Ph: 538-3700

Location: Davis County Jail Complex,
800 West State St.,
Farmington

Service entrance

Schedule: First Wednesday of Jan., Mar., July, and Sept.,
7 p.m.

City: Logan Contact Person: Paul Hansen, WO7N
VEC: ARRL 1676 East 1600 North

Logan, Utah 84321

Home Ph: 753-4843 Bus. Ph: 752-6425

Schedule: Second Saturday of April and October, 9:00
a.m.

City: Ogden Contact Person: Matthew George, AB7GM
VEC: ARRL 473 Hilland Road

Ogden, UT 84404

Phone: 393-9159

Recorded exam information: 627-6064

Location: Weber State College, Science and Technology
Building, Rm 228

Schedule: First Saturday of May and November, 8:00
a.m.

City: Provo Contact Persons: Steve and Linda
Whitehead

VEC: W5YI

497 South 700 East

Payson, Utah 84651

Home Ph: 465-3983 Bus. Ph: 225-

5200

Location: Provo Campus of Utah Valley State College

Schedule: Third Wednesday evening of each month

Notes: Do not confuse this location with the larger Orem
campus.

City: Salt Lake City Contact Person: Gordon Smith,
K7HFV

VEC: ARRL

632 University Street

Salt Lake City, Utah 84102

Home Ph: 582-2438 Bus. Ph: 532-3400
Ext. 8116

Location: Blue Cross/Blue Shield Cafeteria

2455 East Parley's Way

Main (west) building, West door

3

Schedule: First Saturday of Feb., Apr., June, Aug., Oct. and Dec.

20 w.p.m.: 8:00 a.m. 13 w.p.m.: 8:30 a.m. 5 w.p.m.: 9:15 a.m.

No code test needed: Any time between 8 and 10 a.m.

Notes: Pre-registration is required. The owners of the building require

that the door be kept locked. Those who pre-register will receive

the code required to get in. Pre-registration also speeds the session and gets licenses on the way faster after the session. It takes only a few minutes by phone or on the air. Gordon usually monitors 146.62.

City: Salt Lake City Contact Person: Eugene McWherter, N7OVT
VEC: W5YI 536 E. Leland Avenue
Salt Lake City, Utah 84115

Home Ph: 484-6355

Location: Granite High Seminary Building
Approximately 33rd South and 5th East

Schedule: Last Tuesday of each month, 7 p.m.

Notes: This session is intended primarily for those seeking Novice, Technician, or Technician-plus licenses. Only elements 1A, 2 and 3A will be administered. Pre-registration is required.

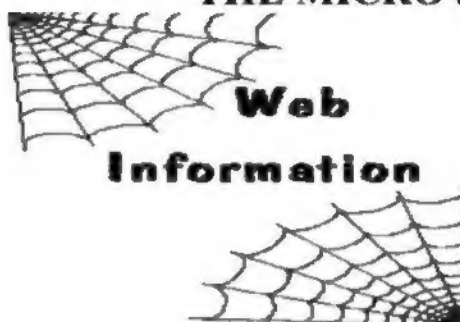
THINGS TO BRING TO TEST SESSION

1. Two forms of ID (If licensed, your original and one form of ID)
2. \$6.05 - Cash or Check.
3. A copy of your license, and or copies of your pending 610 form or certificate of credit along with the original.
4. You may bring a filled out 610 form or a form will be available at the test session.
5. Pencils or pens.
6. You may bring a calculator but you must show that it is not pre-programmed.

EAST HIGH SCHOOL IS SPONSORING AN AMATEUR NOVICE, TECH, TECH+ CLASS WILL INCLUDE CODE. WILL BE SEPT., 19 FROM 7-9 PM FOR 8 WEEKS. 8th SOUTH 1300 EAST

UARC WEB PAGE ADDRESS!
<http://www.xmission.com/~uarc>

THE MICROVOLT



My CompuServe address 73060,1510

Our ARRL Section Manager

jimkatpa@aol.com

ARRL Home page <http://www.arrl.org>

Canadian Bacon (Hams) <http://www.rac.ca>

DX Info

<http://www.clinetifl/~jukka/webcluster.html>

Electronic Swapmeet

<http://www.westes.com/Ads/Ads.html>

Our Federal Government

<http://www.fedworld.gov>

F.C.C. <http://www.fcc.gov>

House of Representatives

<http://www.house.gov>

Internet/Packet Gateway

<http://www.w2xo.pgh.pa.us>

I.T.U. Info <http://www.itu.ch>

Lat/Long Lookup

<http://www.mit.edu:8001/geo>

Neighborhood Antennas

<http://www.hamweb.com/~sjl/stoner/antenna.html>

NTIA <http://www.ntia.doc.gov>

Sarax

http://www.nasa.gov/sarex/sarex_mainpage.html

REMEMBER, IF YOU HAVE A INTERNET ADDRESS THAT YOU WOULD LIKE IN THE MICROVOLT, OR A WEB PAGE THAT YOU FIND PARTICULARLY USELESS, I MEAN USEFUL. PLEASE CALL COKIE AT 280-1762.

OVERHEARD AT A RECENT BOARD

MEETING- We were going over particulars for the Steak Fry, such as money that needed to be allocated for certain things. Someone moved for ice cream money, someone else seconded it, it was law. Someone else brought up the subject of porta-potties. Maureen turned a bright red after she raised her hand and realized that she she had said: "I move on the porta-potties!"

CLUBS

UTAH AMATEUR RADIO CLUBS

UARC or Utah Amateur Radio Club meets the first Thursday of each month except the months of July and August. The meeting is held in the Theatre Building located on the Salt Lake County Fairgrounds (5200 S. and 200 E.) just south of Murray Park at 7:30 PM. There is a newcomer's meeting held prior to the main meeting at 7:00 PM.

The Davis County Amateur Radio Club meets the 2nd Saturday of each month at 10:00 AM at the Davis County Sheriff's Office, 800 West State street, Farmington UT. Members and nonmembers are welcome. Dues are \$15.00 per year and can be paid at any club meeting. The Davis Club supports the 147.04 repeater. DAVIS ARES conducts a net each Thursday at 7:00 PM on 147.42 simplex. They also have a DAV code for packet on 145.07. For further information please contact Neil Parkes, NSUVP 299-3430.

OARC or Ogden Amateur Radio Club meets the 3rd Wednesday of each month in Ogden at 7:00 PM. The meetings are held at the Red Cross building at 2955 Harrison BLVD. Members and nonmembers are invited. Dues are \$15.00 per year and can be sent to P.O. Box 3353, Ogden, Utah 84409. OARC supports the 146.90 repeater and conducts a net there Tuesdays at 7:30 PM. They also support the 146.82 repeater. The contact person is Jerry Peters WA7ADK who can be reached at 825-8798.

The VHF Society is a group dedicated to maintaining a system of repeaters in our area. Dues are \$10.00 per year and can be sent to PO Box 482 Bountiful Utah 84011-0482. The VHF Society holds a swap and traffic net for it's members each Tuesday night at 8:00 P.M. on the 146.940 repeater. For further information please contact Eldon Keart KB7OGM at 571-9955.

Salt Lake County ARES (Amateur Radio Emergency Services) conduct a net each Wednesday Night at 8:00 PM on the 146.88 repeater. All amateurs are welcome to participate. Their in-person meeting is held the third Wednesday of each month. For more information please contact John Parkes, KA7GZH at 278-5846 or Richard Evans N7PGE at 265-9346.

Utah Valley ARES holds their general meeting the 1st Tuesday of every month at 7:00 PM. They also conduct a net each Tuesday at 9:00 P.M. on the 147.34 repeater which is also linked to the 224.7 repeater. The contact person is Robert Earl. N7EGG at 225-8870

THE MICROVOLT

MARA or Mercury Amateur Radio Association is a world wide group of Radio Amateurs dedicated to training and traffic handling for emergency operation. They conduct VHF nets each Wednesday at 9:00 PM. They also conduct health and welfare traffic net on 3.873 MHz (80 meters). The Salt Lake area is on the 146.74 repeater and their contact person is Willy Peaks N7VYL at 466-1114. The Ogden area is on the 145.49 repeater and the Provo area on the 145.37 repeater with Vinco Newmeyer N7MLP at 785-5611 as their contact person.

UPRA (Utah Packet Radio Association) holds their general meeting on the 2nd Saturday of each month at 2:00 PM at the State Capitol Annex Building north of the State Capital. All amateurs are welcome. The purpose of the club is to educate people who are new to packet and to coordinate packet activities. Their dues are \$15.00 per year and can be sent to PO Box 92 Riverton, UT 84065. Their contact person is Jack Christensen, KC7NX at 277-6629.

UBET (Utah Box Elder Thicket) holds a net every Wednesday at 8:00 PM on the 145.43, 448.300, 149.29 repeaters. This net is followed by a CW net at approx. 8:30. Net control is Phil Stofkas KJ7LM, Garland UT.. They also meet the first Thursday of every month at 7:00 PM in the basement of the Zions Bank on the corner of main and first north in Brigham City. Their contact person is Stew Greenwood AB7BA at 863-2795.

THE BRIGERLAND AMATEUR RADIO CLUB meets the 2nd Thursday of the month (except June, July, and August) in the basement of the Sheriffs Office. They hold a net at 9:00 PM on the 147.20 repeater every Tuesday. Their contact person is Dean Stevens N7WVY at 753-2664.

THE UTAH TCP/IP Users Group Of UTUG is an informal group that discusses TCP/IP protocols and other packet information. The are geared to all levels of users, new and seasoned. They hold a weekly net Sundays at 8:00 PM on the 146.620 repeater. Their contact person is Matt Simmons KG7MH at 965-1038

The High Valley Net from Heber meets every Monday at 9:00 PM on the 147.18 repeater. Their contact person is Doug Neilson, N7PPW at 756-5927 or Joe Chenworth, KG7GY at 564-3598

The University of Utah Radio Club is open to University Staff, alumni and students. There is a fully equipped station available 24 hours a day. Their contact persons are Marvin Hatch KA7TPH at 581-6085 or Clint Turner KA7OEI at 972-5541

The Salt Lake Community College Amateur Radio Club is open to anyone. They would like to welcome interested parties to join them. They meet on the South campus in room N285 on the first Saturday of the Month at 3:00 PM. Please contact Keith KJ7SL at 957-3247

Rocky Mountain Radio Assn. is open to all Utah hams and they support the 447.900, 448.400, 448.700 repeaters. Their net is on 447.800 and 52.525 (six meters) every Wednesday night at 8:00. Please contact Marc Peterson (KB7YJJ) at 977-1845 for info!

Brigham Young University Amateur Radio Club (BYUARC) serves the families of all BYU students, staff, faculty, and alumni. The BYUARC check offers nearly every possible mode of amateur radio communications. The club also services the W7OHR 147.2 60 Mhz and 449.075 Mhz repeaters, located on the BYU campus. Autopatch access is available to all BYUARC members. For more information, call 378-COAX or contact the BYUARC Faculty Representative, Wayne Voorheis, KC7HIK0 at voorheis@byu.edu.

NEWS RELEASE

AMATEUR RADIO: A NATIONAL
RESOURCE FOR IMMEDIATE
RELEASE

SALES INFORMATION: LISA
TARDETTE 860-594-0255
OTHER INFORMATION:
JAY MABEY 860-594-0241
1996-1997 ARRL REPEATER
DIRECTORY



The American Radio Relay League is pleased to announce the 1996-1997 Repeater Directory. It's the 25th Anniversary of the ARRL Repeater Directory and we are celebrating in style. Completely updated with the latest information, here's some of what you'll find in the pocket-sized 25th Anniversary of the ARRL REPEATER DIRECTORY.

- expanded listings for US and foreign repeaters as well as greatly expanded propagation beacon listings.
- many handy hints on repeater operation and interference tracking. Also featured is an overview of the use of the LITZ (Long-Time Zero) system and Wilderness Protocol.
- compact and easy access to ARRL Officers (complete with email addresses), Spectrum Committee, Digital Committee and Future Systems Committee, with names and addresses.
- names and addresses for Frequency Coordinators
- ARRL Band plans for all VHF and UHF spectrum allocations.

THE MICROVOLT

- complete listing of ARRL Special Service Clubs, with their meeting times and locations.

SOFT COVER PUBLICATION DATE: MAY
1996 RETAIL: \$8.00

THE ARRL EXTRA CLASS LICENSE MANUAL (SIXTH EDITION)

The American Radio Relay League is pleased to announce the sixth edition of the ARRL EXTRA CLASS LICENSE MANUAL. This new License Manual has been completely revised and updated to match the newest Amateur Extra Class (Element 4B) Question Pool, released by the Volunteer-Examiner Coordinator's Question Pool Committee in December 1995. The questions in the new question pool will be used on

Amateur Extra Class (element 4B) license exams starting July 1, 1996, and are expected to be used until June 30, 2000.

SOFT COVER PUBLICATION DATE: MAY
1996 RETAIL: \$12.00



This Just In

ROSTER NEWS

At the board meeting lastnight I questioned the board on what we should do with the roster. There was many good suggestions, such as throw it away.(HI) no just kidding, some people wanted to put it in a Microvolt. Other people felt that they wanted to get a Microvolt instead of a roster. Some people have felt that if they get a roster instead of a MicroVolt, that they are being cheated out of a Microvolt. Which I can understand, last year when we got Decembers roster after not getting one for monthes I was really dissapointed That in January all we got was this lousy

(no offense to "roster-creators" everywhere) roster. Until I got ahold of the Microvolt and seen that the Microvolt started to be published monthly.

Some other suggestions was to put the roster in maybe three Microvolts. I wasn't too big on this idea because I was afraid that if anyone was like me at all and they lost part of the roster, then you might be out a bunch of members.

The solution to the Roster problem was to print the whole Roster at a copy shop (not the printer) and to pay for the copying costs. The Roster will be given out at Steak Fry, Swap Meet in September, and maybe upcoming meetings.

We cannot send the Roster (in full) in the Microvolt because of the size of the Microvolts and the size of the Roster. If someone wants a roster, that cannot get to the meetings, then they will have to send me a SASE (Self addressed Stamped Envelope) It will have to be a large envelope, as the Roster is 6 pages long. The Roster is in alphabetical and call order. (It's in larger print, too!) I have considered the fact that we have some people in the club that might have difficulty reading the real small print Rosters.

But anyway, this way it should only cost the club about \$60 dollars versus \$500 or so.

Any questions, feel free to give me a call. Any input is greatly appreciated!

THE MICROVOLT

Thanks and 73s
Cokie Eddy
Microvolt Editor



**YOU MAY
BE A
TECHNO-
NERD...**

Chuck Johnson

(continued from
last

Microvolt...)

Thanks Chuck!

- 27- If you are currently gathering the components to build your own nuclear reactor.
- 28- If you own one or more white short-sleeve dress shirts.
- 29- If you have ever backed- up your hard drive.
- 30- If you have ever saved the power cord from a broken appliance.
- 31- If you have ever purchased an electronic appliance "as-is".
- 32- If you see a good design but still have to change it.
- 33- If the sales people at (Name a Computer Store!) can't answer any of your questions.
- 34- If you still own a slide rule and you know to work it.

- 35-If the thought that a CD could refer to finance or music never enters your mind!
- 36-If you own a set of itty-bitty screw drivers, but you don't remember where they are.
- 37-If you rotate your screen savers more frequently than your automobile tires.
- 38-If you have a functioning home copier machine, but every toaster you own turns bread into charcoal.
- 39-If you have more toys than your kids.
- 40-If you need a checklist to turn on the TV.
- (Ed. Note- In my house it goes like this...If you want to play a pay channel, you have to stick the TV in Cable...the TV remote box has to be on the station you want to watch...you have to make sure that the TV/VCR button is on TV and then you have to go up and change the Antenna 1/Antenna 2 button. But if you want to watch something in the kids' room then you have to... (AHHHH!!) The paperwork with the schematic is on the TV- I listen to the radio.)
- 41-If you have introduced your kids by the wrong name.
- 42-If you have a habit of destroying things in order to see how the work.
- 43-If your I.Q. is higher than your weight.

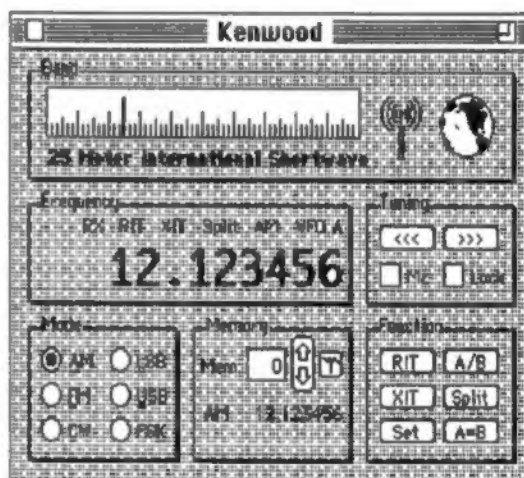
THE MICROVOLT

- 44-If the Microphone or visual aids at a meeting don't work and you rush to fix them.
- 45- If you can remember 7 computer passwords but not your anniversary.
- 46-If you have memorized the program schedule for the Discovery Channel and you have seen most of the shows already.

(Continued next Microvolt)

DONT FORGET!

-Peter H. Grillo AH3C



You are all invited to participate in the Utah Centennial QSO Party on August 24-25. This is an opportunity for Utah radio amateurs to generate good will, get international recognition, and to have fun all at the same time.

This QSO party can only succeed if we all participate, even if only for a few hours. Single operator and group operations are all encouraged. If you have a mobile rig, or can get away for the weekend to put up an antenna with a portable set up, you are encouraged to find a rare Utah county to operate from. If you can't get away, make sure you find time to operate from home.

Announcements of this activity will be published in CQ Magazine, QST, CQ Contest, National Contest Journal, World Radio, The DX Bulletin, and a large number of world wide radio publications.

You will have an opportunity to be the station that everyone else is looking for. Plan ahead. Any station will do. Throw wires to the trees and make it happen!

For further information, contact Pete (AH3C at 277-4513 or ah3c@burgoyne.com), or Alan (K6XO at 571-7009 or alan@es.com).

UTAH CENTENNIAL QSO PARTY

OBJECT: Stations outside of Utah work as many Utah stations in as many UT counties as possible. Stations in Utah work anyone.

WHEN: August 24-25, 1996

TIME: Saturday 1500z (0900 MDT)- Sunday 2100z (1500 MDT). Maximum operation: 24 of the 30 hours. Minimum off time: 30 minutes (indicate off time in log).

CLASS: FIXED, MOBILE, PORTABLE (Single & Multi-op categories). One signal transmitted at a time. ALL CONTACTS MUST BE SIMPLEX!

EXCHANGE: Utah stations send QSO number, name and county. Stations outside Utah send QSO number, name and state/province. DX stations send only QSO number and name. There is no partial contact credit. FIXED STATION- Phone contact is worth 2 points, CW contact: 4 points. UTAH MOBILE or PORTABLE- Phone contact: 4 points, CW contact: 8 points.

MULTIPLIERS: Utah Stations- count states (48), Canadian Provinces (13), and Countries (including KH6 and KL7, excluding VE/W). Use the CQWW multiplier list of countries. Utah stations may work other Utah Stations for QSO credit, but no credit is given for different counties worked in Utah. Only the State credit can be counted. Multipliers are counted once per band. The same station can be worked on each different band and mode for QSO points.

COUNTY LISTS:

BEV, BV-Beaver	Box, Bo-Box Elder
CAC, CA-Cache	CAR, CR-Carbon
DAG, DG-Daggett	DAV, DV-Davis

THE MICROVOLT

DUC, DU- Duchesne	EME, EM- Emery
GAR, GA- Garfield	GRA, GR- Grand
IRO, IR- Iron	JUA, JU- Juab
KAN, KA- Kane	MIL, MI- Millard
MOR, MO- Morgan	PIU, PI- Piute
RIC, RI- Rich	SJU, SJ- San Juan
SAL, SL- Salt Lake	SPE, SP- San Pete
SUM, SU- Summit	SEV, SV- Sevier
TOL, TO- Tooele	UIN, UI- Uintah
UTA, UT- Utah	WCH, WC- Wasatch
WEB, WE- Weber	WAY, WN- Wayne
WSH, WG- Washington	

SCORE:

Total score is the total number of QSO points multiplied by the total number of multipliers.

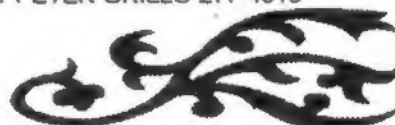
FREQUENCIES: 160, 80, 40, 20, 15, 10, 6 and 2 meters. WARC band contacts do not count. Suggested phone frequencies: 1850, 3850, 7230, 14,250, 21,300, 28,450. Try 147.54 MHz at 2000, 0000, and 0400z. Suggested CW frequencies: 1810, 3550, 7050, 14,050, 28,050. Try CW on the half-hour, ten meters at 1900z and 160 at 0500z.

ENTRIES: Entries must be post marked no later than October 15, 1996. Logs may be submitted by postal mail to: UCQP, c/o AH3C, 2150 East 6200 South, Salt Lake City, UT 84121. Entries may be submitted by e-mail in ASCII format to alan@es.com. Label diskettes with call and county/state/province/country. Include a hard copy of the summary sheet. A one dollar donation to help defray the cost of printing and postage is encouraged, but required. To obtain a package containing log and summary sheets send a business size SASE to the above address.

AWARDS: A minimum of 50 QSO's is required to qualify for an award. The high scoring entry from within Utah and from outside UTAH will receive the UTAH CENTENNIAL QSO CHAMPION TROPHY. Top 5 stations in Utah and top 5 stations outside Utah will receive a BEEHIVE STATE HONEY JAR! Top scoring entries from each Utah County, State province, and country will receive a UTAH CENTENNIAL QSO PARTY certificate. Special awards will be made to selected entries as determined by the awards committee.

OPERATING HINT: The last 6 hours of operating are a must. Roving mobile stations will assure that the rarest counties will be on the air. DX stations, try 20 meters!

NOTE! WE ARE LOOKING FOR VOLUNTEERS TO HELP WITH THIS EVENT. IF YOU ARE INTERESTED CONTACT PETER GRILLO 277-4513



SILENT KEY



DR. CLAYTON CLARK Mr. Propagation

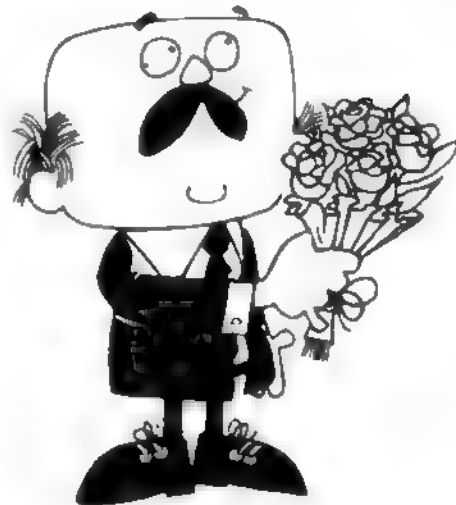
☺ *The sky began to cry today. I didn't know why... the sun was shining, the sky was blue, clouds were passing by. The radio was making "clunking sounds", the salute to someone Grand. We said "good-bye" to Clayton Clark, now I understand...Eternal 73's Clayton*
We said good-bye to a friend today. Dr Clayton Clark, 84, died June 7th, 1998, at Logan Regional Hospital of causes incident to age. He was buried at Logan Cemetery. If you still wish to send the family flowers or a card, the family asks that in lieu of flowers contribution to the Sunshine Terrace Foundation or to the Clayton Clark Electrical Engineering Scholarship Fund at USU. (some of this information was provided by the Herald Journal in Logan)

Clayton did his doctoral dissertation at Stanford on a type of propagation known as "Sporadic E."

Dr. Clark was a Professor Emeritus at Utah State University where he taught antenna theory and electromagnetic wave behavior for fifty years. He was quite possibly the most respected authority on these topics in the state.

He is going to be terribly missed by the amateur radio community.

THE MICROVOLT RADIO??? WOMAN???



Romantic Man Lets License Expire... But He's B-A-C-K!

Feature Of The Month

This month we are featuring Stan Stevenson KC7EPU (W6ERL 1928) Stan was licensed in 1928. This was the year UARC officially became a club. In the mean time, Stan was attending John Adams junior high in Los Angeles, California when he was licensed. He became interested in amateur radio when he was taking a class in electricity at the junior high.

Back then, communication in amateur radio was Morse Code only. Voice was around but it was too expensive and unpractical. It wasn't until the late thirties and the early forties that the voice became affordable and easier to use. In those early years there was no such thing as a transceiver. You had to have a receiver and a transmitter in order to communicate. When sending the morse code in the early twenties they used spark transmitters, but people didn't like them because they were too hard to copy. Stan always used tube transmitters. Stan says it was a challenge back then because you had to zero beat each other in order to communicate. Stan built his own radio equipment.

Stan was very active in handling emergencies. The time he remembered the most was when he was handling emergency traffic for the Long Beach California Earthquake in 1933. Many messages were sent and received and it was all done with morse code. The hams were highly praised by Long Beach County for their excellent work.

Stan was a Radioman in the Navy for four years. He also worked for the L.A. Police Department for twenty years. After getting out of the Navy, he fell in love and got married. Stan says that romance was more fun than radio and let his license lapse. It wasn't until many years later that he was re-licensed. When he came to Utah in 1977, he was the director of court services in Salt Lake County and was on the Los Angeles County Superior Court before he came to Utah. It was in 1993 when an old friend told MARA about Stan. They located him and convinced him to get back into radio. He received his technician plus license and in July 1994 obtained his general license. He said it was easy. "It is like riding a bike, once you learn you never forget" Stan is a member of ARES and MARA.

Stan, welcome back to the hobby
73 N7HVF Linda Reeder

**REMEMBER THAT
YOU ONLY
HAVE UNTIL 6 JULY
TO BUY YOUR
STEAK FRY TICKETS!
TALK TO GARY
OPENSHAW FOR
SPECIFICS!
(prices follow...)**



THE MICROVOLT

STEAK FRY PRICES

**MEMBERS \$2.00 Children \$3.00
Guests \$9.00**



**THE MICROVOLT STAFF
WOULD LIKE TO WISH
EVERYONE OUT THERE A
VERY HAPPY FOURTH OF
JULY!
PLEASE REMEMBER TO
BE CAREFUL!**

FROM THE EDITOR

I am most likely going to be in the Ohio Valley during the Steak Fry, so if someone has something that they want in Septembers issue of the Microvolt, please make sure you send it to me before August 10th. Thanks,

Cokie Eddy

NO LITTLE LEOS ALOUD

**"Little LEO"
Interests Threaten
Ham Bands**



The following information was taken from ARRL Bulletins ARLB032 through ARLB036, dated May 30, 1996, and ARLB037 dated June 6, 1996.

The American Radio Relay League is asking radio amateurs across the United States to help defeat a threat to the two most heavily used amateur VHF and UHF bands.

An industry working group known as IWG-2A that is preparing draft US proposals for the 1997 World Radiocommunication Conference has before it a list of "candidate bands" for low-earth orbit mobile satellites ("little LEOs") that includes, among a number of others suggested for consideration, the 144 and 420 MHz

THE MICROVOLT

bands. Little LEOs are intended mainly to offer commercial paging and other low-data-rate messaging services. The list of candidate bands was submitted by little LEO industry representatives at a meeting of IWG-2A on May 7. ARRL Technical Relations Manager Paul Rinaldo, W4RI, was present and objected strongly to the inclusion of these two bands. He was told that objections should be submitted in written comments, and the ARRL did so on May 15. At the same time the ARRL advised the industry participants in IWG-2A along with its chairman, Warren Richards of the Department of State, that if we did not receive assurance that the bands would be dropped from the list of candidate bands we would have no choice but to advise members in July QST that the bands were under threat. No such assurances were forthcoming. Instead, we were told that as long as little LEO allocations requirements remained unsatisfied, everything had to remain on the table.

This response was not acceptable. Accordingly, when July QST went to the printer on Tuesday, May 28, it included the following editorial.

The editorial speaks for itself, but it is worth emphasizing that there is no reason for panic. What we are dealing with is an ill-considered industry effort that is in its early stages, there is no reason to believe there is any government support for any move against these two amateur bands. Our mission is to quash the idea before it goes any further. An outpouring of thoughtful comment by amateurs, explaining why the public interest would not be served by the introduction of commercial services into these bands, will go a long way toward ensuring the desired outcome.

The editorial may be reprinted in its entirety with the credit line,

"Reprinted with permission from July 1996 QST."

It Seems to Us, July 1996 QST:

Write Now. Get out a pen and paper, or boot up your computer. There's work to be done. Your help is needed to defend two meters and 70 cm.

Yes, that's right—the two most popular and crowded amateur VHF/UHF bands. But don't panic, and don't "go ballistic." Here's what's happening, and what you can do about it.

The United States is preparing for the 1997 ITU World Radiocommunication Conference, WRC-97. In the past, the public has been able to participate in the preparations for such conferences by responding to FCC Notices of Inquiry. In March, the FCC announced a streamlining of its International Bureau's preparatory processes for WRCs. Under the new scheme, the NOIs have been eliminated in favor of increased emphasis on WRC Advisory Committees.

For WRC-97, a series of Informal Working Groups (IWGs) of the Advisory Committee has been created to address specific agenda items. The output of each IWG will go directly to a joint FCC-NTIA-Department of State Steering Committee of the Advisory Committee. There, draft proposals as received from the IWGs will be

reviewed and forwarded to the FCC for possible release as preliminary U.S. proposals for public comment.

In announcing the streamlined WRC preparatory process, the FCC tried to reassure those who might be concerned about reduced opportunities for public participation: "Interested parties should note that input to the Advisory Committee may be sent at any time directly to the Chair of the WRC-97 Advisory Committee, the Chairs of the Advisory Committee's Informal Working Groups, Cecily C. Holiday, the FCC's federal officer of the WRC-97 Advisory Committee, or to Damon C. Ladson, the alternate federal officer." Hold that thought while we shift gears to the substance of the issue.

One of the WRC-97 agenda items includes consideration of possible additional frequency allocations for the mobile-satellite service.

So-called "little LEOs," low-earth orbit satellites below 1 GHz, already have allocations. Their proponents claim these are inadequate and are trying for more. The needs of little LEOs are being addressed in IWG-2A, chaired by Warren Richards of the Department of State. The ARRL technical relations staff participates in IWG-2A to represent Amateur Radio interests. At the May 7 IWG-2A meeting, an industry representative proposed a list of "candidate bands" for little LEOs.

The list includes a number of bands that would negatively impact existing services, and does not include others that would be technically more feasible but to which strong objection from incumbents could be expected—the point being that some political, rather than purely technical, judgment already has influenced the list. Incredibly, 144-148 and 420-450 MHz were included on the list.

This is the first time in memory that another service has been proposed for the two-meter amateur band. We must make sure it is also the last time.

We do not need to explain to ARRL members the extensive use that is made of these bands by amateurs. The two bands provide the backbone of our local public service communications effort. Voice and data, mobile and fixed, even television—the list of present amateur uses is a long one, and of future uses is even longer. Both are already used for satellite services and for moonbounce and extended-range terrestrial operations requiring extremely sensitive receivers and high levels of effective radiated power.

Apparently we did need to explain all this to the little LEO industry representatives, so we did just that—both at the meeting and in a follow-up letter on May 15. We also explained that we had to regard the matter as extremely serious. No one with the slightest background in radiocommunication could possibly believe that a mobile-satellite service could be introduced into either band without disrupting existing and future amateur operations. Therefore, we said, if we did not receive assurance that they would be taken off the list of candidate bands by the deadline for this issue of QST, we would have no choice

THE MICROVOLT

but to bring the matter to the attention of the entire membership.

The response we received was unsatisfactory. In effect, we were told the little LEO industry would consider our views but that until their spectrum needs are satisfied, all bands must remain under consideration.

So, this is a call to action. We must get across to the industry and government participants in IWG-2A that the 144-148 MHz and 420-450 MHz bands cannot be considered as candidates for mobile-satellite services. We need to drive the point home so forcefully, with so many grassroots responses, that no one is ever tempted to try this again.

Which brings us back to that invitation for "interested parties" to send input "at any time." There's no time like the present.

Instead of directing comments to the list of individuals distributed in an earlier bulletin and included in the pre-press version of K1ZZ's editorial, send comments by e-mail to wrc97@fcc.gov. Send written comments—an original plus one copy—to Office of the Secretary, Federal Communications Commission, Washington, DC 20554. Each comment

should include at the top, "Reference No. ISP-96-005" and "Advisory Committee Informal Working Group 2A." The FCC staff says comments will be given prompt consideration. All written and electronic comments from Amateur Radio operators received at the Commission have been included as part of the public record on WRC-97.

Do comment. But be civil. Don't abuse people who are simply doing their jobs. We have to get across that casting covetous eyes on amateur bands is counter-productive, and contrary to the public interest. To accomplish this we need a lot of comments, including yours. But remember that the objective is to educate and persuade, not to intimidate. We don't need to. The facts are on our side.

To monitor the FCC's ongoing WRC-97 preparations, visit its WRC-97 home page at <http://www.fcc.gov/ib/wrc97/>. Write now. Right now. David Sumner, K1ZZ

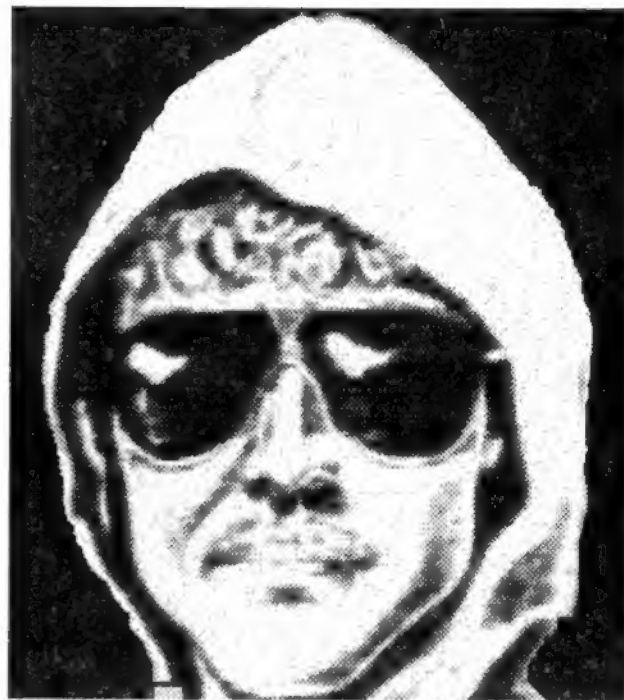
ON ADVICE-NOT SO GOOD

(QUOTED BY CASEY STENGAL)

DON'T CUT OFF YOUR NOSE YOURSELF



**DON'T LET THIS
HAPPEN TO US**



WANTED

BY THE U.A.R.C

IF YOU OR SOMEONE THAT YOU KNOW IS
NOT RECEIVING THEIR MICROVOLTS,
PLEASE CONTACT GARY OPENSHAW

I AM NOT SURE BUT I AM UNDER THE
IMPRESSION THAT EVEN THOUGH THE
MICROVOLT HAS ONLY BEEN OUT SINCE
JANUARY, NOVEMBER'S ROSTER THAT WE
RECEIVED IN JANUARY IS GOING TO BE
HELD AGAINST ME, SO I MAY HAVE TO
FLOAT AN EXTRA MICROVOLT MAYBE
NOVEMBER?-ed Kc7mdv

